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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/803,684	Applicant(s) AALTONEN ET AL.	
	Examiner HO SHIU	Art Unit 2457	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-58, 60-80 and 86-130 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-58, 60-80, and 86-130 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 23-58, 60-80, and 86-130 are pending in this application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 23, 34-35, 45, 51-52, 58, 69-70, 80, 91-92, 102, 113-114, and 118 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy et al. (US Pub # 2002/0142780 A1, hereinafter Airy) in view of Chu et al. (US Pub # 2002/0049853, hereinafter Chu) and in view of Na (US Pub # 2006/0129631, hereinafter Na, listed on PTO-892 on 4/14/2010).**

4. With respect to claims 23, 58, 80, and 102, Airy discloses an apparatus system, method, computer program product comprising a processor and a memory storing executable instructions that in response to execution by the processor cause the apparatus to at least perform the following: determine to transmit an upload request for content from an apparatus via a network to a recipient, ([0010], lines 1-5, a subscriber unit is transmitting a request to send data blocks to the base transceiver station) the

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upload request comprising a request to upload content from the apparatus to the recipient, the content comprising a plurality of data packets ([0010], lines 1-5, a subscriber unit is transmitting a request to send data blocks to the base transceiver station); receive from the recipient in response to the upload request, an upload schedule relating to at least one of a time and a manner of uploading the content in an upload session ([0010], lines 11-15, the base transceiver station generates a schedule that includes time slots and frequency blocks in which the requested data blocks are to be transmitted from the subscriber unit to the base transceiver station); determine to upload the content to the recipient in accordance with the upload schedule ([0010], lines 15-17, the subscriber unit transmits the data blocks the subscriber earlier requested to send, according to the schedule). Although Airy discloses devices such as a subscriber units and base transceiver unit in which discloses that memory and a processor is utilized, Airy does not explicitly disclose at least one processor; and at least one memory including computer program code for one or more programs, the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform; after an interruption occurs in the upload session while uploading one of the plurality of data packets, receive an instruction to resume the upload session, the instruction including an identifier of the content and a pointer to the one interrupted packet; and reestablish the upload session to upload to the recipient each of the remaining packets that is not completely uploaded.

In the same field of endeavor, Chu discloses at least one processor ([0089]); and at least one memory including computer program code for one or more programs

([0089]), the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform ([0089]); after an interruption occurs in the upload session while uploading one of the plurality of data packets, receive an instruction to resume the upload session, the instruction including an identifier of the content and a pointer to the one interrupted packet ([0097], [0100]); and reestablish the upload session to upload to the recipient each of the remaining packets that is not completely uploaded ([0098], [0100]). Airy and Chu are analogous art because they both disclose transferring data between devices.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy with at least one processor; and at least one memory including computer program code, the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform; after an interruption occurs in the upload session while uploading one of the plurality of data packets, receive an instruction to resume the upload session, the instruction including an identifier of the content and a pointer to the one interrupted packet; and reestablish the upload session to upload to the recipient each of the remaining packets that is not completely uploaded as disclosed in Chu in order to resume operation of the file transfer. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more efficient system by being able to resume transferring the file without starting from the beginning.

However, Airy and Chu do not clearly disclose after an interruption occurs in the upload session, receive a list of completely uploaded data packet identifiers each of which uniquely identifies one corresponding data packet within the upload session.

In addition, Na discloses after an interruption occurs in the upload session, receive a list of completely uploaded data packet identifiers each of which uniquely identifies one corresponding data packet within the upload session ([0120], [0132], if an upload error occurs, the application server issues a response message comprising a status line to the mobile device. A part of the message includes the range of the content that has been uploaded successfully before the upload error (X-Upload-Range, e.g., 1-1000/1500); reestablish the upload session to upload to the recipient each of the remaining packets that is not completely uploaded ([0134], [0135], [0141], The resumed medias data uploaded from the mobile communication terminal is complete normally which means that the resumed upload has already been established). Airy, Chu, and Na are analogous art because they disclose transferring of files.

Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Airy and Chu with after an interruption occurs in the upload session, receive a list of completely uploaded data packet identifiers each of which uniquely identifies one corresponding data packet within the upload session; reestablish the upload session to upload to the recipient each of the remaining packets that is not completely uploaded as disclosed in Na in order to determine who packets were not delivered. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more efficient system by responding which the

range of the content that has been uploaded successfully before the upload error so the device and resume transmission..

5. With respect to claim 45, Airy discloses an apparatus system comprising a processor and a memory storing executable instructions that in response to execution by the processor cause the apparatus to at least perform the following: receive and upload request for content from a sender via network, wherein the content comprising a plurality of data packets ([0010], lines 1-5, a subscriber unit is transmitting a request to send data blocks to the base transceiver station); determine, in response to the request, an upload schedule relating to at least one of a time and a manner of the sender uploading the content to the apparatus in an upload session; ([0010], lines 10-15, the base transceiver station generates a schedule that includes time slots and frequency blocks in which the requested data blocks are to be transmitted from the subscriber unit to the bas transceiver station); receive the content from the sender in accordance with the upload schedule ([0010], lines 15-17, the subscriber unit transmits the data blocks the subscriber earlier requested to sent, according to the schedule). Although Airy discloses devices such as a subscriber units and base transceiver unit in which discloses that memory and a processor is utilized, Airy does not explicitly disclose at least one processor; and at least one memory including computer program code, the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform; track received data packets and assemble a list of completely uploaded data packets during the upload session; and after an

interruption occurs in the upload session while uploading one of the plurality of data packets, reestablish the upload session to upload to the recipient each of the remaining packets that is not completely uploaded.

In the same field of endeavor, Chu discloses at least one processor ([0089]); and at least one memory including computer program code for one or more programs ([0089]), the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform ([0089]); track received data packets and assemble a list of completely uploaded data packets during the upload session ([0066], [0100]); and after an interruption occurs in the upload session while uploading one of the plurality of data packets, reestablish the upload session to upload to the recipient each of the remaining packets that is not completely uploaded ([0098], [0100]). Airy and Chu are analogous art because they both disclose transferring data between devices.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy with at least one processor; and at least one memory including computer program code, the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to perform; after an interruption occurs in the upload session while uploading one of the plurality of data packets, receive an instruction to resume the upload session, the instruction including an identifier of the content and a pointer to the one interrupted packet; and reestablish the upload session to upload to the recipient each of the remaining packets that is not completely uploaded as disclosed in Chu in

order to resume operation of the file transfer. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more efficient system by being able to resume transferring the file without starting from the beginning.

However, Airy and Chu do not clearly disclose after an interruption occurs in the upload session, receive a list of completely uploaded data packet identifiers each of which uniquely identifies one corresponding data packet within the upload session.

In addition, Na discloses after an interruption occurs in the upload session, receive a list of completely uploaded data packet identifiers each of which uniquely identifies one corresponding data packet within the upload session ([0120], [0132], if an upload error occurs, the application server issues a response message comprising a status line to the mobile device. A part of the message includes the range of the content that has been uploaded successfully before the upload error (X-Upload-Range, e.g., 1-1000/1500); reestablish the upload session to upload to the recipient each of the remaining packets that is not completely uploaded ([0134], [0135], [0141], the resumed medias data uploaded from the mobile communication terminal is complete normally which means that the resumed upload has already been established). Airy, Chu, and Na are analogous art because they disclose transferring of files.

Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Airy and Chu with after an interruption occurs in the upload session, receive a list of completely uploaded data packet identifiers each of which uniquely identifies one corresponding data packet within the upload session; reestablish

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the upload session to upload to the recipient each of the remaining packets that is not completely uploaded as disclosed in Na in order to determine who packets were not delivered. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more efficient system by responding which the range of the content that has been uploaded successfully before the upload error so the device and resume transmission..

6. With respect to claims 34, 51, 69, 91 and 113, Airy discloses wherein the upload schedule includes at least one instruction based upon the content and at least one network over which the content is uploaded, and wherein providing for uploading the content comprises providing for uploading the content based upon the content and the at least one network ([0010], lines 8-11, 19-22, the base user queue size estimate influences future schedules generated by the base transceiver station which means that the schedule is depended upon the size of the file (content)).

7. With respect to claims 35, 52, 70, 92 and 114, Airy discloses wherein the upload schedule includes at least one instruction based upon at least one upload time of the content determined based upon the content and at least one network over which the content is uploaded, and wherein providing for uploading the content comprises providing for uploading the content based upon the at least one upload time ([0010], lines 8-11, 19-22, the base user queue size estimate influences future schedules generated by the base transceiver station which means that the schedule is depended

upon the size of the file (content)).

8. With respect to claim 118, it is rejected for the same reasons as above. Airy discloses wherein the apparatus is further caused to push the upload schedule to the sender thereby automatically uploading the content in accordance with the upload schedule, the upload descriptor includes information of a preferred time, place and technology for uploading the content ([0010]). In addition, Chu discloses the upload session is interrupted by user intervention ([0097]).

9. With respect to claim 129, Airy discloses wherein the network includes a cellular network ([0003]).

10. With respect to claim 130, it is rejected for the same reasons above. In addition, Na discloses after the interruption, receiving at an apparatus an instruction to reestablish the upload session, the instruction including an identifier of the content and an identifier of the one interrupted packet ([0134], [0135], [0141-0142])

11. Claims 24, 29-30, 46, 64-65, 80, 86-87, 103, and 108-109 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy and Chu and Na and in view of Brown et al. (US PUB 2002/0194205 A1, hereinafter Brown).

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12. With respect to claims 24, 38 and 103, Airy, Chu, and Na do not disclose delete the content from the memory after uploading the content to the recipient.

In the same field of endeavor, Brown discloses delete the content from the memory after uploading the content to the recipient ([0094], lines 2-5, sending instructions to the server to move, rename, or delete a single file or directory). Airy, Chu, Na and Brown are analogous art because they disclose transferring data between servers, machines, clients, servers, etc.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy, Chu, and Na with deleting the content from the memory after uploading the content to the recipient as taught in Brown in order to have full authority/control over content that was meant to be accessed for a short period amount of time, for saving storage purposes, or other general purposes. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more versatile system by allowing client/admin etc. to be able to make changes to information on the server/database etc.

13. With respect to claims 29, 48, 64, 86 and 108, Airy, Chu, and Na do not clearly disclose process the content, and upload the processed content.

In the same field of endeavor, Brown discloses process the content, and upload the processed content ([0099], lines 1-5, [0100], lines 4-7, being able to implement partial downloads and uploads to minimize the amount of data that is transferred over

the wire when a file is updated). Airy, Chu, Na and Brown are analogous art because they deal with transferring data between servers, machines, clients, servers, etc.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy, Chu, and Na with process the content, and upload the processed content as disclosed in Brown in order to be able to transfer part of a document that has changed. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more versatile system by being able to implement partial downloads/uploads and not the whole entire document to minimize the amount of data that is transferred.

14. With respect to claims 30, 65, 87 and 109, the claims are rejected as the same reasons as claims 29, 48, 64, 86 and 108 above. In addition, Brown discloses wherein processing the content comprises at least one of transcoding or truncating at least a portion of the content ([0099], lines 1-5, [0100], lines 4-7, being able to implement partial downloads and uploads to minimize the amount of data that is transferred over the wire when a file is updated).

15. Claims 25-28, 46-47, 60-63, 82-85, and 104-108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy and Chu and Na and in view of McDonnell et al. (US Patent # 7,257,386, hereinafter McDonnell).

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16. With respect to claims 25, 46, 60, 82 and 104, Airy, Chu, and Na do not clearly disclose receive information reflecting a current state of at least one of the recipient or the apparatus before uploading the content, wherein the apparatus uploads the content based upon the at least one instruction dependent upon the state, and the information reflecting the current state, of at least one of the recipient or the apparatus.

In the same field of endeavor, McDonnell discloses providing for receive information reflecting a current state of at least one of the recipient or the apparatus before uploading the content, wherein the apparatus uploads the content based upon the at least one instruction dependent upon the state, and the information reflecting the current state, of at least one of the recipient or the apparatus (column 7, lines 45-50, col. 6, lines 41-54, the message/data/file is going to transmit with a low or high bandwidth connection based on the response from the recipient regarding if they wish to receive the message from a low bandwidth or high bandwidth connection. The data can be split into a minor portion send via the slower connection, PLMN, while the major portion is transmitted when the mobile device is within range of the WBSR base station). Airy, Chu, Na and McDonnell are analogous art because they disclose transferring data between systems/clients/servers etc.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy, Chu, and Na with providing for receiving information reflecting a current state of at least one of the recipient or the apparatus before uploading the content, wherein providing for uploading the content comprises providing for uploading the content based upon the at least one

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instruction dependent upon the state, and the information reflecting the current state, of at least one of the recipient or the apparatus as disclosed in McDonnell in order to be able to be able to upload the data to be split into a first minor portion which is transmitted before the major portion is transmitted when the mobile device is in range. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more versatile system by being able to upload/download data when the unit is in range to connect with a connection that allows a better transfer rate.

17. With respect to claims 26, 61, 83, and 105, the claims are rejected as the same reasons as claims 25, 46, 60, 82 and 104 above. In addition, McDonnell discloses wherein providing for receiving information reflecting a current state comprises providing for receiving information including at least one of a connectivity, location, actual movement or predicted movement of at least one of the recipient or the apparatus (column 7, lines 45-50, column 8, lines 40-42, the message/data/file is going to transmit with a low or high bandwidth connection based on the response from the recipient regarding if they wish to receive the message from a low bandwidth or high bandwidth connection. The data can be split into a minor portion send via the slower connection, PLMN, while the major portion is transmitted when the mobile device is within range of the WBSR base station).

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18. With respect to claims 27, 47, 62, 84 and 106, Airy, Chu, and Na do not clearly disclose wherein the upload schedule includes at least one instruction dependent upon a state of at least one network over which the content is uploaded, and wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform: providing for receiving information reflecting a current state of the at least one network before uploading the content, wherein providing for uploading the content comprises providing for uploading the content based upon the at least one instruction dependent upon the state, and the information reflecting the current state, of the at least one network.

In the same field of endeavor, McDonnell discloses wherein the upload schedule includes at least one instruction dependent upon a state of at least one network over which the content is uploaded, and wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform: providing for receiving information reflecting a current state of the at least one network before uploading the content, wherein providing for uploading the content comprises providing for uploading the content based upon the at least one instruction dependent upon the state, and the information reflecting the current state, of the at least one network (column 7, lines 39-41, lines 45-50, the message/data/file is going to transmit with a low or high bandwidth connection based on the response from the recipient regarding if they wish to receive the message from a low bandwidth or high bandwidth connection. The data can be split into a minor portion send via the slower connection, PLMN, while the major portion is transmitted when the mobile device is within range of

the WBSR base station). Airy, Chu, Na, and McDonnell are analogous art because they disclose transferring data between systems/clients/servers etc.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy with wherein the upload schedule includes at least one instruction dependent upon a state of at least one network over which the content is uploaded, and wherein the memory stores executable instructions that in response to execution by the processor cause the apparatus to further perform: providing for receiving information reflecting a current state of the at least one network before uploading the content, wherein providing for uploading the content comprises providing for uploading the content based upon the at least one instruction dependent upon the state, and the information reflecting the current state, of the at least one network as taught in McDonnell in order to be able to be able to upload the data to be split into a first minor portion which is transmitted before the major portion is transmitted when the mobile device is in range. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more versatile system by being able to upload/download data when the unit is in range to connect with a connection that allows a better transfer rate.

19. With respect to claims 28, 63, 85 and 107, the claims are rejected as the same reasons as claims 27, 47, 62, 84 and 106 above. In addition, McDonnell discloses wherein the information includes at least one of traffic on the at least one network or bandwidth available to at least one of the recipient or the apparatus on the at least one

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network (column 7, lines 39-41, lines 45-50, column 6, lines 33-40, the message/data/file is going to transmit with a low or high bandwidth connection based on the response from the recipient regarding if they wish to receive the message from a low bandwidth or high bandwidth connection. The data can be split into a minor portion send via the slower connection, PLMN, while the major portion is transmitted when the mobile device is within range of the WBSR base station).

20. Claims 33, 37, 39-42, 50, 53-54, 56, 68, 72-73, 75-77, 84-95, 97-99, 112, 116-117, and 120-121 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy and Chu and Na and in view of Kohno (US Pub 2003/0120802 A1, hereinafter Kohno).

21. With respect to claims 33, 50, 68, 90 and 112, Airy, Chu, and Na does not disclose wherein the content includes a plurality of pieces, wherein the upload schedule includes at least one instruction comprising an ordering of the plurality of pieces of the content, and wherein at least a portion of the content is uploaded based upon the ordering of the plurality of pieces of the content.

However, in the same field of endeavor, Kohno discloses wherein the content includes a plurality of pieces, wherein the upload schedule includes at least one instruction comprising an ordering of the plurality of pieces of the content, and wherein at least a portion of the content is uploaded based upon the ordering of the plurality of pieces of the content ([0114], lines 4-8, [0115], lines 1-7, [0111], lines 9-12, The ARW

processing unit of the data transmission terminal identifies packets to be retransmitted based on the option parameter, timestamp, and sequence numbers. The ACK-RTCP packet includes fields of heater, format, packet type, ..., and received-sequence numbers). Airy, Chu, Na and Kohno are analogous art because they disclose sending/receiving/transferring data.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy, Chu, and Na with wherein the content includes a plurality of pieces, wherein the upload schedule includes at least one instruction comprising an ordering of the plurality of pieces of the content, and wherein at least a portion of the content is uploaded based upon the ordering of the plurality of pieces of the content as disclosed in Kohno in order for the transferring of data to be in sync with one another. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another so that streaming of video, audio, or files of the same nature can be provided to the designated location without having to complexly re-configure the assortment of data received.

22. With respect to claims 37, 53, 72, 94 and 116, Airy, Chu, and Na does not disclose wherein the upload request is sent with an upload descriptor that enables at least one of the apparatus or the recipient to determine if an interruption occurs in uploading the plurality of data packets such that the recipient receives less than the plurality of data packets of the content, and if an interruption occurs in uploading the plurality of data packets, enables the recipient to recover the content.

However, in the same field of endeavor, Kohno discloses wherein the upload request is sent with an upload descriptor that enables at least one of the apparatus or the recipient to determine if an interruption occurs in uploading the plurality of data packets such that the recipient receives less than the plurality of data packets of the content, and if an interruption occurs in uploading the plurality of data packets, enables the recipient to recover the content ([0069], lines 5-14, [0074], lines 1-3, packet analyzing unit of the receiver terminal detects error such as packet loss, and if an error is detected, determine whether or not to issue a request for packet retransmission), the recipient is configured to recover the content based upon the upload descriptor such that the recipient receives the plurality of data packets ([0074], lines 1-15, [0075], determine that a retransmission request be issued, the receiver terminal create a retransmission request). Airy, Chu, Na and Kohno are analogous art because they disclose sending/receiving/transferring data.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy, Chu, and Na with wherein the upload request is sent with an upload descriptor that enables at least one of the apparatus or the recipient to determine if an interruption occurs in uploading the plurality of data packets such that the recipient receives less than the plurality of data packets of the content, and if an interruption occurs in uploading the plurality of data packets, enables the recipient to recover the content as disclosed in Kohno in order for the designated recipient to acknowledge that files are missing during transfer due to known/unknown errors/interruptions. One of ordinary skill in the art would have been

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motivated to incorporate the teachings with one another so that proper re-transfer of the missing files only will be transmitted again to save time, bandwidth, memory, cost, etc.

23. With respect to claims 54, 73, 95, and 117, it is rejected for the same reasons as claims 53, 72, 94 and 116 above. In addition, Kohno discloses determining at least one remaining data packet to be uploaded to the apparatus to thereby complete uploading of the plurality of data packets of the content; instructing the sender to send the at least one remaining data packet; and receiving the at least one remaining data packet such that the apparatus receives the plurality of data packets ([0074], lines 1-15, packet analyzing unit of the receiver terminal detects error such as packet loss, and if an error is detected, determine whether or not to issue a request for packet retransmission).

24. With respect to claim 39, Airy, Chu, and Na does not disclose wherein uploading the content comprises providing for uploading the plurality of data packets and at least one information packet regarding at least one group of at least one data packet.

However, in the same field of endeavor, Kohno discloses wherein uploading the content comprises providing for uploading the plurality of data packets and at least one information packet regarding at least one group of at least one data packet ([0069], lines 1-14, flag indicating the end of the frame is set). Airy, Chu, Na and Kohno are analogous art because they disclose sending/receiving/transferring data.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy, Chu, and Na with

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wherein uploading the content comprises providing for uploading the plurality of data packets and at least one information packet regarding at least one group of at least one data packet as disclosed in Kohno in order for the designated recipient to acknowledge that files are missing during transfer due to known/unknown errors/interruptions. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another so that proper re-transfer of the missing files only will be transmitted again to save time, bandwidth, memory, cost, etc.

25. With respect to claims 40, 75, 97 and 119, the claims are rejected as the same reasons as claims 39, 55, 74, 96 and 118 above. In addition, Na discloses the at least one information packet including information of a number of data packets to be received between the at least one information packet and an information packet immediate before or after the at least one information packet (col. 4., lines 18-29). In addition, Kohno discloses wherein the apparatus is further caused to upload the at least one packet that enables the recipient to monitor the uploaded data packets to determine, based upon at least one information packet, in an interruption occurs in uploading the plurality of data packets such that the recipient receives less than the plurality of data packets of the content, and if an interruption occurs in uploading the plurality of data packets, to thereby enable the recipient to recover the content such that the recipient receives the plurality of data packets ([0074], lines 1-15, packet analyzing unit of the receiver terminal detects error such as packet loss, and if an error is detected, determine whether or not to issue a request for packet retransmission).

26. With respect to claim 56, the claims are rejected as the same reasons as claim 55 above. In addition, Kohno discloses wherein the apparatus is further caused to upload the at least one packet that enables the recipient to monitor the uploaded data packets to determine, based upon at least one information packet, in an interruption occurs in uploading the plurality of data packets such that the recipient receives less than the plurality of data packets of the content, and if an interruption occurs in uploading the plurality of data packets, to thereby enable the recipient to recover the content such that the recipient receives the plurality of data packets ([0074], lines 1-15, packet analyzing unit of the receiver terminal detects error such as packet loss, and if an error is detected, determine whether or not to issue a request for packet retransmission).

27. With respect to claims 41, 57, 76, 98 and 120, Airy, Chu, and Na does not clearly disclose wherein the apparatus is further caused to determine if an interruption occurs in uploading the content such that the recipient only receives a portion of the content, and if an interruption occurs in uploading the content, executable the apparatus is further caused to: receive a length of the received portion of the content to thereafter upload a remaining portion of the content to the recipient.

However, in the same field of endeavor, Kohno discloses wherein the apparatus is further caused to determine if an interruption occurs in uploading the content such that the recipient only receives a portion of the content, and if an interruption occurs in

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uploading the content, executable the apparatus is further caused to: receive a length of the received portion of the content to thereafter upload a remaining portion of the content to the recipient ([0074], lines 1-15, packet analyzing unit of the receiver terminal detects error such as packet loss, and if an error is detected, determine whether or not to issue a request for packet retransmission). Airy, Chu, Na and Kohno are analogous art because they disclose sending/receiving/transferring data.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy, Chu, and Na with wherein providing for uploading the content enables at least one of the apparatus or the to determine if an interruption occurs in uploading the content such that the recipient only receives a portion of the content, and if an interruption occurs in uploading the content, executable instructions stored by the memory cause the apparatus to further perform: providing for receiving a length of the received portion of the content to thereby enable the sender to thereafter providing for uploading a remaining portion of the content to thereby recover the content such that the recipient receives all of the content as disclosed in Kohno in order for the designated recipient to acknowledge that files are missing during transfer due to known/unknown errors/interruptions. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another so that proper re-transfer of the missing files only will be transmitted again to save time, bandwidth, memory, cost, etc.

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28. With respect to claims 42, 77, 99 and 121, the claims are rejected as the same reasons as claims 41, 57, 76, 98 and 120 above. Na discloses one or more bit ranges corresponding to a list of one or more packet identifiers of the remaining one or more packets (col. 1, lines 44-59, col. 6, lines 1-9). In addition, Kohno discloses wherein the remaining portion of the content based upon a bit range of the remaining portion of the content ([0074], lines 1-15, [0069], lines 5-8, packet analyzing unit of the receiver terminal detects error such as packet loss, and if an error is detected, determine whether or not to issue a request for packet retransmission).

29. With respect to claims 55, 96, it is rejected for the same reasons as above. Airy discloses wherein the apparatus is further caused to push the upload schedule to the sender thereby automatically uploading the content in accordance with the upload schedule, the upload descriptor includes information of a preferred time, place and technology for uploading the content ([0010]). In addition, Chu discloses the upload session is interrupted by user intervention ([0097]).

30. Claims 32, 49, 67, 89 and 112 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy and Chu and Na and in view of Squibbs et al. (US PUB 2004/0198426 A1, hereinafter Squibbs).

31. With respect to claims 32, 49, 67, 89 and 112, Airy, Chu, and Na does not disclose wherein the upload schedule includes at least one instruction defining at least

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one deadline for uploading the content, and wherein the content is uploaded based upon the at least one deadline.

However, in the same field of endeavor, Squibbs discloses wherein the upload schedule includes at least one instruction defining at least one deadline for uploading the content, and wherein the content is uploaded based upon the at least one deadline ([0061], lines 10-17, [0063], lines 21-24, having regard to the remaining time in the hotspot for the device, there is sufficient time to complete the data transfer). Airy, Chu and Squibbs are analogous art because they disclose transferring data/files to a unit/server/client/system etc.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy, Chu, and Na with wherein the upload schedule includes at least one instruction defining at least one deadline for uploading the content, and wherein the content is uploaded based upon the at least one deadline as disclosed in Squibbs in order to ensure if a file cannot be transferred, it will not prevent other files from transferring because of constant re-transferring of the same file. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more efficient system by accommodating non-stationary users transferring files/content while moving from one location to another that incorporate the ability to let users transfer files as needed so that the transfer of file/files will be transferred before the user moves out of the incorporated transfer area.

32. Claims 36, 71, 93 and 115 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy and Chu and Na and in view of Kobayashi et al. (WIPO # WO/2003/026216, hereinafter Kobayashi).

33. With respect to claims 36, 71, 93 and 115, Airy, Chu, and Na does not disclose wherein the apparatus is further caused to: receive a trigger to send an upload request wherein the upload request is sent in response to the trigger independent of interaction from a user of the apparatus.

However, in the same field of endeavor, Kobayashi discloses wherein the memory stores executable instructions that in response to execution by the process cause the apparatus to further perform: providing for receiving a trigger to send an upload request wherein providing for sending an upload request comprises providing for sending an upload request in response to the trigger independent of interaction from a user of the apparatus ([0178], lines 1-6, the transfer start request of the file for using it for a presentation from a Client PCi to the communicator 3A of one's conference room). Airy, Chu, Na and Kobayashi are analogous art because they disclose transferring files/data.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy, Chu, and Na with wherein the memory stores executable instructions that in response to execution by the process cause the apparatus to further perform: providing for receiving a trigger to send an upload request wherein providing for sending an upload request comprises providing

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for sending an upload request in response to the trigger independent of interaction from a user of the apparatus as disclosed in Kobayashi in order to incorporate multiple files being transferred at a particular time. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more efficient system so that the client/user that is sending the file knows when the best allotted time to transfer the file is.

34. Claims 31, 66, 88 and 110 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy and Chu and Na and in view of Brown as applied to claims 23, 29, 58, 64, 80, 86, 102, and 108 and in further view of Kohno.

35. With respect to claims 31, 66, 88 and 110, the claims are rejected as the same reasons as claims 23, 29, 58, 64, 80, 86, 102, and 108 above. Airy, Chu, Na, and Brown do not disclose wherein the apparatus processes the content by breaking up the upload content into a plurality of portions.

However, in the same field of endeavor, Kohno discloses wherein the apparatus processes the content by breaking up the upload content into a plurality of portions ([0068], lines 1-12, packet analyzing unit of the receiver terminal detects error such as packet loss, and if an error is detected, determine whether or not to issue a request for packet retransmission). Airy, Chu, Na, Brown, and Kohno are analogous art because they disclose sending/receiving/transferring data.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy, Chu, Na and Brown with wherein the apparatus processes the content by breaking up the upload content into a plurality of portions as disclosed in Kohno in order to be able to use parts of the data even though there are loss of packets ([0074]). One of ordinary skill in the art would have been motivated to incorporate the teachings of one another to establish a more efficient system so any machine/system/etc. will only have to retransmit the packets that are loss and not the entire file/data that is being transferred.

36. Claims 43, 44, 78, 79, 100, 101, 122-123 and 126-128 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy and Chu and Na and in view of Kohno and in further view of Deen (US Pub 2003/0167317 A1, hereinafter Deen).

37. With respect to claims 43, 78, 100 and 122, the claims are rejected for the same reasons as claims 23, 41, 58, 76, 80, 98, 102, and 120 above. While Na discloses information comprising one or more bit ranges corresponding to a list of one or more packet identifiers of the remaining one or more packet discloses (col. 1, lines 44-59, col. 6, lines 1-9), the combination of Airy, Chu, Na and Kohno does not disclose wherein the length of the received portion of the content is received in accordance with a hypertext transfer protocol (HTTP) HEAD technique, and the remaining portion of the content is uploaded in accordance with one of a HTTP POST of a HTTP PUT technique, wherein

the one of the HTTP POST or HTTP PUT technique includes uploading the remaining portion of the content including header information.

However, in the same field of endeavor, Deen discloses wherein the length of the received portion of the content is received in accordance with a hypertext transfer protocol (HTTP) HEAD technique, and the remaining portion of the content is uploaded in accordance with one of a HTTP POST or a HTTP PUT technique, wherein the one of the HTTP POST or HTTP PUT technique includes uploading the remaining portion of the content including header information ([0045]). Airy, Chu, Kohno, and Deen are analogous art because they disclose transferring/sending data/files.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy, Chu and Kohno with wherein the length of the received portion of the content is received in accordance with a hypertext transfer protocol (HTTP) HEAD technique, and the remaining portion of the content is uploaded in accordance with one of a HTTP POST or a HTTP PUT technique, wherein the one of the HTTP POST or HTTP PUT technique includes uploading the remaining portion of the content including header information as disclosed in Deen in order to send a request to the server in the form of a request method. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another to establish a more efficient system by utilizing familiarity with HTTP methods for HTTP 1.1 protocol.

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38. With respect to claims 44, 79, 101, and 123, the claims are rejected for the same reasons as claims 23, 41, 58, 76, 80, 98, 102, and 120 above. Na discloses information comprising a list of one or more packets identifiers of the remaining one or more packets (col. 1, lines 44-59, col. 6m lines 1-9). In addition, Deen discloses wherein the apparatus is further caused to send a hypertext transfer protocol (HTTP) HEAD request to the recipient, and the remaining packets are uploaded in accordance with one of a HTTP POST or a HTTP PUT technique, wherein the one of the HTTP POST or HTTP PUT technique includes uploading the remaining packets including header information ([0045]).

39. With respect to claim 126, it is rejected for the same reasons above. In addition, Na discloses wherein the at least one information packet further includes information uniquely describing the data packets before or after the information packet (Col. 4, lines 18-29).

40. With respect to claim 127, Airy discloses wherein information uniquely describing the data packets includes a sequence of packet cycle redundancy checks ([0058]).

41. With respect to claim 128, it is rejected for the same reasons above. In addition, Na discloses wherein the number of data packets to be received between two information packets varies (Col. 4, lines 18-29).

42. Claims 74, and 124-125 are rejected under 35 U.S.C. 103(a) as being unpatentable over Airy and Chu and Na and in view of Harrington et al. (US Patent # 6,289,012, hereinafter Harrington).

43. With respect to claim 124, Airy discloses receiving an upload descriptor of the content from the sender via the network at the apparatus in accordance with the upload schedule ([0010]). However, Airy, Chu, and Na do not clearly disclose the upload descriptor including a size of the content; and reestablishing by the apparatus the upload session further based upon the upload descriptor.

In the same field of endeavor, Harrington discloses the upload descriptor including a size of the content (col. 8, lines 49-65, col. 10, lines 48-67); and reestablishing by the apparatus the upload session further based upon the upload descriptor (col. 11, lines 27-45). Airy, Chu, Na, and Harrington are analogous art because they disclose transferring of files.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Airy, Chu and Na with the upload descriptor including a size of the content; and reestablishing by the apparatus the upload session further based upon the upload descriptor as disclosed in Harrington in order to know what items it is suppose to download. One of ordinary skill in the art would have been motivated to incorporate the teachings with one another in order to perform error checking and to reassemble the download item.

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44. With respect to claim 74, it is rejected for the same reasons as above. Airy discloses wherein the apparatus is further caused to push the upload schedule to the sender thereby automatically uploading the content in accordance with the upload schedule, the upload descriptor includes information of a preferred time, place and technology for uploading the content ([0010]). In addition, Chu discloses the upload session is interrupted by user intervention ([0097]).

Response to Arguments

45. Applicant's arguments, filed 04/22/2011, with respect to the rejection(s) of claim(s) 23-58, 60-80, and 86-130 under 35 Airy, Chu, and Redeske have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Airy, Chu, and Na.

Conclusion

46. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HO SHIU whose telephone number is (571)270-3810. The examiner can normally be reached on Mon-Thur (8:30am - 4:00pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HTS
07/25/2011

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